

AMENDMENTS TO THE CLAIMS

Claims 1-17 and 20-37 were pending at the time of the Action.

Claims 1, 16, 17, 24, 27, and 33-37 are amended.

Accordingly, claims 1-17 and 20-37 remain pending.

1. (Currently Amended) A command line utility embodied in one or more computer-readable media, the command line utility comprising:

a command schema including one or more commands for engaging, from a management station on a network, an operating system on at least one selected target station accessible over the network enabling at least one of retrieval of management information from and initiation of a management service available through an object model target schema recognized by the at least one selected target station accessible over the a-network;

an interactive user interface configured to receive the one or more commands in the command schema from a user of the management station, allowing the user to formulate an instant request for at least one of management information and management services and communicate a response of the at least one selected target station to the user; and

an object model command schema to define a mapping between the one or more commands in the command schema and the object model target schema and interpret the one or more commands from the command schema into a management command operable to cause one of the retrieval of the management information from and the initiation of the management service on the at least one selected target station.

1 2. (Original) A command line utility as recited in claim 1, the
2 command schema comprising:

3 an alias class which defines a command template, each alias of the
4 alias class representing a single command.

5
6 3. (Original) A command line utility as recited in claim 2, the
7 command schema further comprising:

8 a verb class as a subclass to the alias class, each instance of the verb
9 class representing a behavior available through an alias;

10 a format class as a subclass to the alias class, each instance of the
11 format class representing a list of properties that will be returned through
12 processing an alias; and

13 a connection class as a subclass to the alias class, each instance of
14 the connection class providing parameters used through an alias when establishing
15 a connection to a target namespace within the target schema.

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17 4. (Original) A command line utility as recited in claim 3, the
18 command schema further comprising:

19 a parameter class as a subclass to the verb class, each instance of the
20 parameter class representing parameters accepted by a verb from the verb class.

1 5. (Original) A command line utility as recited in claim 3, the
2 command schema further comprising:

3 a property class as a subclass to the format class, each instance of the
4 property class representing property values for properties within a list of
5 properties.

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7 6. (Original) A command line utility as recited in claim 2, the
8 command schema further comprising:

9 a localized string class, each instance of the localized string class
10 providing language-specific text relevant to an alias.

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12 7. (Original) A command line utility as recited in claim 2, the
13 command schema further comprising:

14 a qualifiers class, each instance of the qualifiers class representing
15 qualifiers to be applied to elements of an alias.

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17 8. (Original) A command line utility as recited in claim 2, the
18 command schema further comprising:

19 a see-also association, each instance of the see-also association
20 providing associations to aliases which are related to an alias.

21
22 9. (Original) A command line utility as recited in claim 1, wherein
23 the one or more commands are organizable into role-oriented namespace, such that
24 commands related to particular administrative tasks are found together.
25

1 10. (Original) A command line utility as recited in claim 1, wherein
2 the command schema is extensible to permit the generation of additional
3 commands to be added to the one or more commands.

4
5 11. (Original) A command line utility as recited in claim 1, wherein
6 the command schema is configurable to permit reconfiguration of the one or more
7 commands.

8
9 12. (Original) A command line utility as recited in claim 1, the
10 command schema comprising:

11 an alias class to define alias instances, each alias instance
12 representing a single command;

13 a verb class to define verb instances, each verb instance representing
14 behavior available through an alias instance;

15 a parameter class to define parameters accepted by a verb instance;

16 a format class to define format instances, each format instance
17 having a list of properties to be displayed through an alias instance;

18 a property class to define property instances, each property instance
19 representing a property value from a property list;

20 a connection class to define connection instances, each connection
21 instance representing connection parameters used by an alias instance to establish
22 a connection to the target schema;

23 a qualifier class to define qualifier instances, each qualifier instance
24 representing constraints on elements of an alias instance;
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1 a localized string class to define localized string instances, each
2 localized string instance representing a text localization for translating text into a
3 localized language; and

4 a see-also association to associate an alias instance with other related
5 alias instances.

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7 13. (Original) A command line utility as recited in claim 1, wherein
8 the target schema comprises a WMI object model.

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10 14. (Original) A command line utility as recited in claim 1, wherein
11 the command schema is a plurality of command schemas, each command schema
12 representing an instant set of one or more commands.

13
14 15. (Original) A command line utility as recited in claim 1, wherein
15 the command schema resides on a local machine and the target schema resides on
16 one or more remote machines.

1 16. (Currently Amended) A management command system
2 ~~operable to retrieve for at least one of retrieving~~ management information and
3 ~~initiate initiating of~~ a management service available through an object model
4 target schema recognized by at least one selected target station accessible over a
5 network, the management command system comprising:

6 an interactive user interface configured to receive one or more
7 commands in the command schema ~~from~~ formulated as an instant request by a
8 user at a management station for engaging an operating system on at least one
9 selected target station and communicate a response of the at least one selected
10 target station to the user; and

11 a control schema including the one or more commands to be
12 received by the interactive user interface, including:

13 an alias class to define alias instances, each alias instance
14 representing the at least one command;

15 a verb class to define verb instances, each verb instance representing
16 behavior available through an alias instance;

17 a parameter class to define parameters accepted by a verb instance;

18 a format class to define format instances, each format instance
19 having a list of properties to be displayed through an alias instance;

20 a property class to define property instances, each property instance
21 representing a property value from a property list;

22 a connection class to define connection instances, each connection
23 instance representing connection parameters used by an alias instance to establish
24 a connection to the target schema;

1 a qualifier class to define qualifier instances, each qualifier instance
2 representing constraints on elements of an alias instance;

3 a localized string class to define localized string instances, each
4 localized string instance representing a text localization for translating text into a
5 localized language; and

6 a see-also association to associate an alias instance with other related
7 alias instances.

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9 17. (Currently amended) A management application embodied in
10 one or more computer-readable media, the management application comprising:

11 a set of commands generated by an object model command schema
12 to operate against an object model target schema of at least one selected target, the
13 command schema defining a mapping between the set of commands and the target
14 schema; and

15 an interactive interface utility configured to allow a user to formulate
16 an instant request and receive the a-user command to facilitate implementation of
17 individual commands within the set of commands, wherein the interactive
18 interface utility includes at least one of:

19 a command line interface utility configured to receive textual
20 entry of the user command; and

21 a graphical user interface utility.

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23 18. (Canceled).

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25 19. (Canceled).

1 20. (Original) A management application as recited in claim 17,
2 wherein the set of commands is organizable into role-oriented namespace, such
3 that individual commands related to particular administrative tasks are found
4 together.

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6 21. (Original) A management application as recited in claim 17,
7 wherein the command schema is extensible to permit the generation of additional
8 commands to be added to the set of commands.

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10 22. (Original) A management application as recited in claim 17,
11 wherein the command schema is configurable to permit reconfiguration of
12 individual commands in the set of commands.

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14 23. (Original) A management application as recited in claim 17,
15 wherein the command schema comprises:

16 an alias class to define alias instances, each alias instance
17 representing a command within the set of commands;

18 a verb class to define verb instances, each verb instance representing
19 behavior available through an alias instance;

20 a parameter class to define parameters accepted by a verb instance;

21 a format class to define format instances, each format instance
22 having a list of properties to be displayed through an alias instance;

23 a property class to define property instances, each property instance
24 representing a property from a property list;
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1 a connection class to define connection instances, each connection
2 instance representing connection parameters used by an alias instance to establish
3 a connection to the target schema object model;

4 a qualifier class to define qualifier instances, each qualifier instance
5 representing constraints on elements of an alias instance;

6 a localized string class to define localized string instances, each
7 localized string instance representing a text localization for translating text into a
8 localized language; and

9 a see-also association to associate an alias instance with other related
10 alias instances.

24. (Currently Amended) A management application embodied in one or more computer-readable media, the management application comprising:

a first object model to control configuration and behavior of the management application in operating against and managing an operating system of a second object model operating on at least one selected target system accessible over a network, the first object model including:

a set of commands for directing the configuration and the behavior of the management application; and

a command schema defining a mapping between the set of commands and instructions understandable by the second object model; and

an interactive interface configured to receive the set of commands from a user at a management station, wherein the interactive interface includes at least one of:

a command line interface utility configured to allow the user to formulate an instant command and receive textual entry of the user command; and

a graphical user interface utility.

25. (Original) A management application as recited in claim 24, wherein the first object model comprises:

an alias class to define alias instances, each alias instance representing a command used by the management application;

a verb class to define verb instances, each verb instance representing behavior available through an alias instance;

a parameter class to define parameters accepted by a verb instance;

1 a format class to define format instances, each format instance
2 having a list of properties to be displayed through an alias instance;

3 a property class to define property instances, each property instance
4 representing a property from a property list;

5 a connection class to define connection instances, each connection
6 instance representing connection parameters used by an alias instance to establish
7 a connection to the second object model;

8 a qualifier class to define qualifier instances, each qualifier instance
9 representing constraints on elements of an alias instance;

10 a localized string class to define localized string instances, each
11 localized string instance representing a text localization for translating text into a
12 localized language; and

13 a see-also association to associate an alias instance with other related
14 alias instances.

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16 26. (Original) A management application as recited in claim 24,
17 wherein the second object model comprises a WMI object model.
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1 27. (Currently Amended) A method comprising:
2 receiving a command from a user that was formulated as an instant
3 request by the user at a management station through an interactive command line
4 interface;
5 fetching an alias for the command;
6 interpreting the command based on the alias and the current
7 operating environment of the command line interface;
8 executing the command as one or more WMI API calls against a
9 targeted namespace representing at least one selected target system that is
10 accessible via a network;
11 receiving WMI data in XML form;
12 applying an XSL style sheet format the WMI data; and
13 presenting the WMI data through the command line interface.
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15 28. (Original) A method as recited in claim 27, wherein the alias is
16 an instance of an alias class.
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18 29. (Original) A method as recited in claim 28, wherein the alias and
19 the current operating environment are determined by command entries to the
20 command line interface.
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22 30. (Original) A method as recited in claim 28, wherein the alias
23 class is the primary class in a command schema.
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1 31. (Original) A method as recited in claim 30, wherein the
2 command schema additionally includes:

3 a verb class to define verb instances, each verb instance representing
4 behavior available through an alias;

5 a parameter class to define parameters accepted by a verb instance;

6 a format class to define format instances, each format instance
7 having a list of properties to be displayed through an alias;

8 a property class to define property instances, each property instance
9 representing a property from a property list;

10 a connection class to define connection instances, each connection
11 instance representing connection parameters used by an alias to establish a
12 connection to the target namespace;

13 a qualifier class to define qualifier instances, each qualifier instance
14 representing constraints on elements of an alias;

15 a localized string class to define localized string instances, each
16 localized string instance representing a text localization for translating text into a
17 localized language; and

18 a see-also association to associate an alias with other related aliases.

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20 32. (Original) One or more computer-readable media storing
21 computer-executable instructions that, when executed on one or more processors,
22 perform the method of claim 27.
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1 33. (Currently Amended) A computer-implemented method of
2 managing objects in a target schema comprising:

3 providing an interactive user interface configured to allow a user to
4 formulate a set including one or more instant commands operable to receive
5 management information and initiate a management service and receive the
6 commands from the a-user;

7 defining a command structure through an object-oriented command
8 schema, the command schema including an alias class;

9 instantiating an object of the alias class as an alias by receiving
10 parameters of the alias class via the commands received from the user through the
11 user interface, the alias representing a command which maps to an object in the
12 target schema maintained on at least one selected target system accessible via a
13 network configured to at least one of retrieve management information and initiate
14 a management service; and

15 executing the command against the object in the target schema of the
16 at least one selected target system.

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18 34. (Currently Amended) A computer-implemented method as
19 recited in claim 33, further comprising:

20 receiving data related to the object in the target schema in XML
21 form;

22 retrieving an XSL file from a location defined through the alias;

23 formatting the data for display by applying an XSL style sheet from
24 the XSL file; and

25 displaying the data through the user interface.

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2 35. (Currently Amended) A computer-implemented method as
3 recited in claim 33, wherein the user interface is a command line user interface.
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5 36. (Currently Amended) A computer-implemented method as
6 recited in claim 33, wherein the user interface is a graphical user interface.
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8 37. (Currently Amended) One or more computer-readable media
9 storing computer-executable instructions that, when executed on one or more
10 processors, perform the computer-implemented method of claim 33.
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